



# D0 Status Report

## 10/24/2005

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Fermilab



# Data Taking for 10/17 – 10/23



Day	Delivered	Recorded	Eff.	Comments
10/17 (Mon)	2.55 pb <sup>-1</sup>	2.43 pb <sup>-1</sup>	88 %	1 hour downtime due to MDT crates in a bad state after a large halo spike.
10/18 (Tue)	2.06 pb <sup>-1</sup>	1.89 pb <sup>-1</sup>	92 %	
10/19 (Wed)	0.59 pb <sup>-1</sup>	0.55 pb <sup>-1</sup>	94 %	
10/20 (Thu)	2.09 pb <sup>-1</sup>	1.69 pb <sup>-1</sup>	81 %	Surpassed 1 fb <sup>-1</sup> on tape. LCW problem caused Solenoid to slow dump, then fast dump and quench. Luminosity reported by VME electronics.
10/21 (Fri)	2.90 pb <sup>-1</sup>	2.70 pb <sup>-1</sup>	93 %	During squeeze of store 4462, received 108 rad/min.
10/22 (Sat)	3.58 pb <sup>-1</sup>	3.34 pb <sup>-1</sup>	94 %	Controlled access to replace a Calo daughter card. During squeeze of store 4464, received 170 rad/min.
10/23 (Sun)	3.17 pb <sup>-1</sup>	2.92 pb <sup>-1</sup>	92 %	During squeeze of store 4465, received 94 rad/min.

10/17–10/23	16.94 pb <sup>-1</sup>	15.52 pb <sup>-1</sup>	92 %	
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# Notable Events

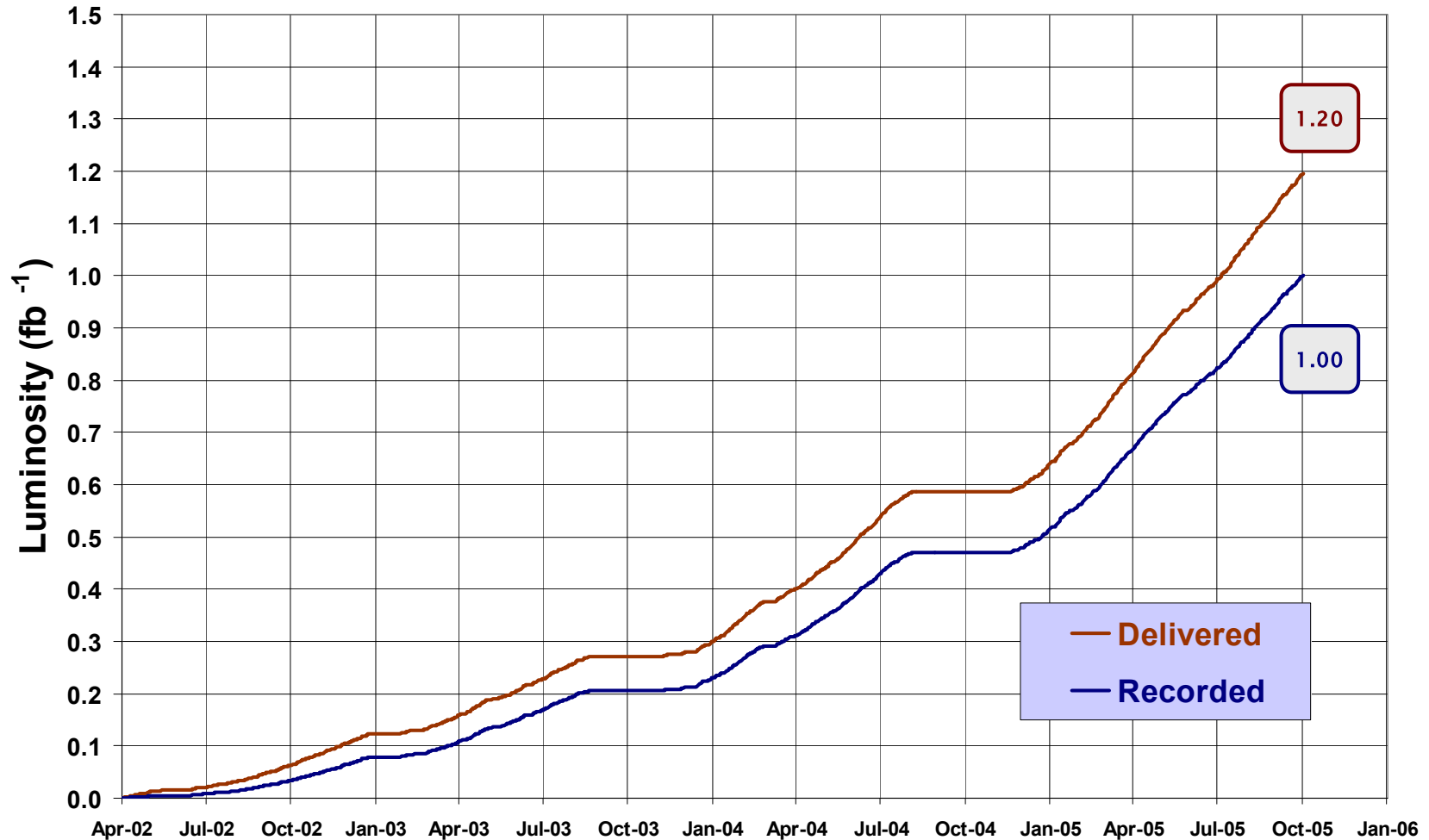


- 10/17 (Mon)
  - 1 hour downtime due to MDT crates being in a bad state after a large halo spike.
- 10/20 (Thu)
  - **D0 recorded luminosity surpassed  $1000 \text{ pb}^{-1}$ .**
  - Solenoid tripped due to LCW high conductivity.
    - A repaired LCW pump was brought on-line, contaminating the low conductivity of the water.
    - This triggered a slow dump. Shortly into the slow dump, we went into a fast dump due to an overly tight quench protection limit.
    - Overall downtime of 3.5 hours.
  - Switched to the luminosity reporting by the VME electronics system from the one by the NIM electronics.



## Run II Integrated Luminosity

19 April 2002 - 20 October 2005



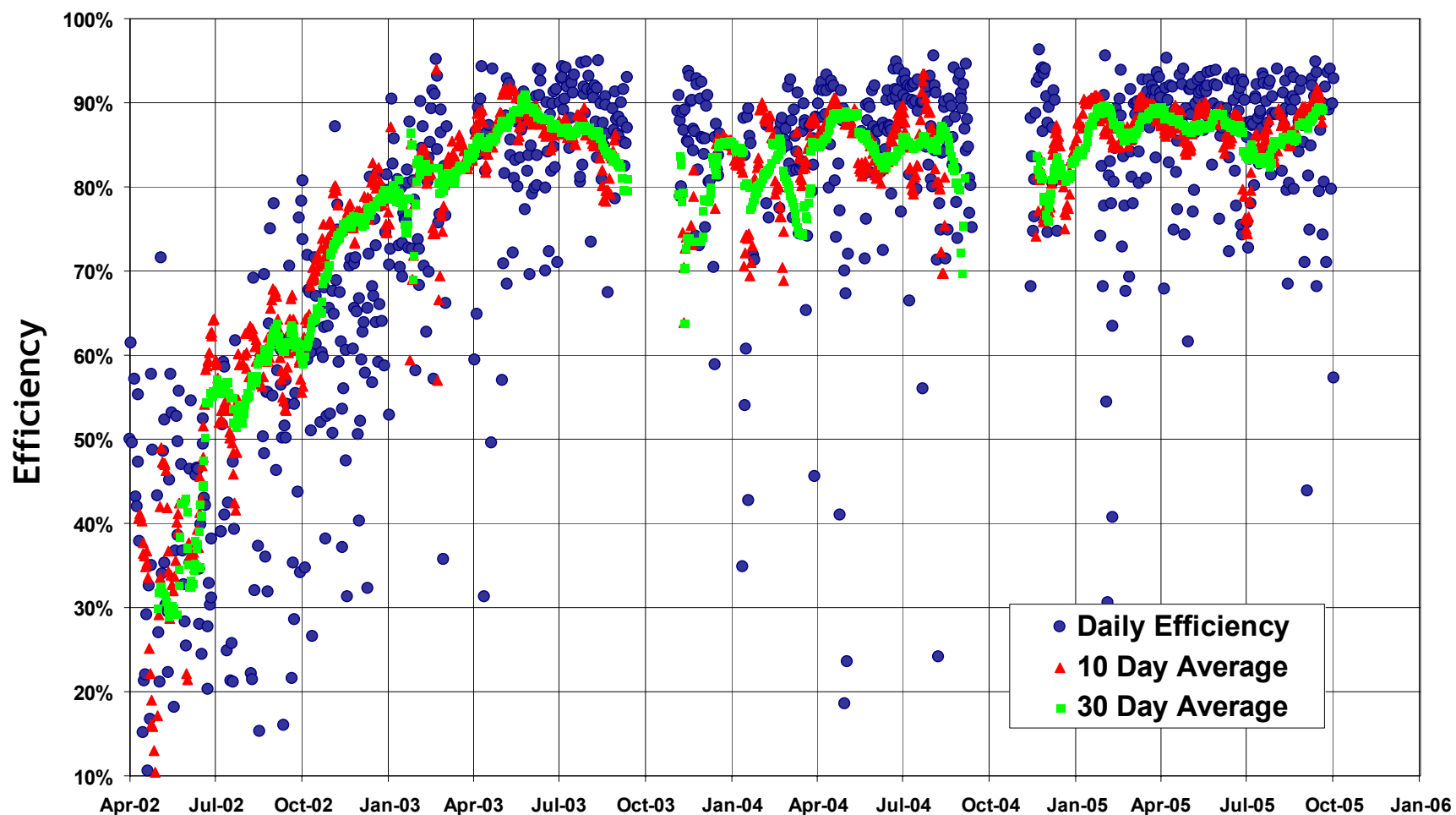
24 October 2005

T. Yasuda, Fermilab



## Daily Data Taking Efficiency

19 April 2002 - 20 October 2005



24 October 2005

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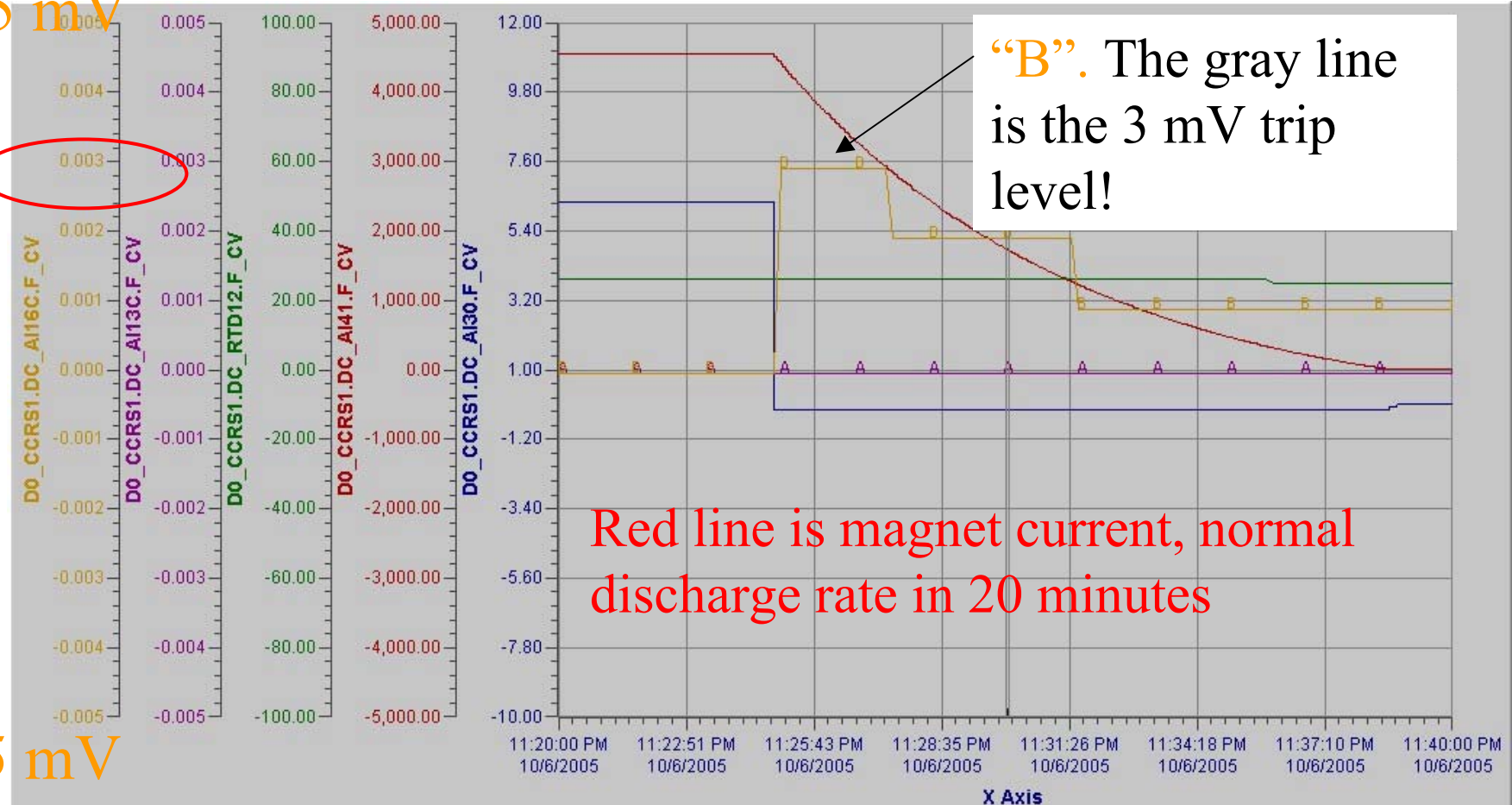


# Oct. 6 Ramp down – Chimney “B” voltage Just made it below the quench detection limit

+5 mV

0

-5 mV



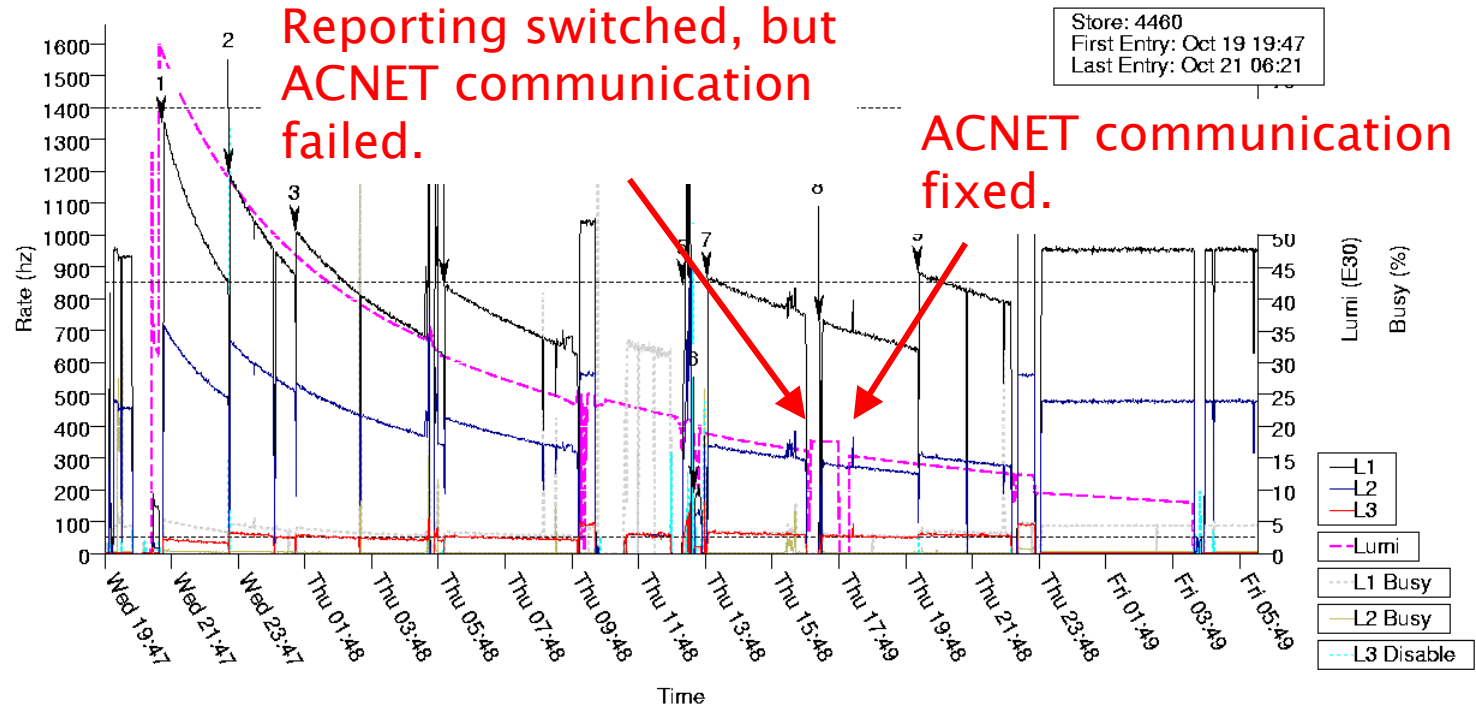
Pen Name	Description	Value	Eng Units
D0_CCRS1.DC_AI30.F_CV	0-10V Analog In - PEI Volt	-0.3	V
D0_CCRS1.DC_AI41.F_CV	0-10V Bipolar Analog In - Mag Curr-2	1,737.2	A
D0_CCRS1.DC_RTD12.F_CV	RTD Input - Dump Resistor	25.8	DegC

10/6/2005 11:20:00 PM

10/6/2005 11:40:00 PM



# Luminosity reporting by new VME electronics



## New electronics:

- Less sensitive to backgrounds and deadtime.
- Less prone to saturation effects.



# Accesses



- 10/17 (Mon)
  - Install and test a Run IIb muon PDT Control Board.
- 10/18 (Tue)
  - Investigate FPS DFE low voltage problems.
- 10/22 (Sat)
  - Replace a calorimeter daughter card and a pulser power supply.





1 fb-1 to Tape!

Please come celebrate at the User's Center  
At 5:15 Today